

patients with NP and AR. MRSA was found in 1% of control and in 40% of patients with NP and AR in 2002, 1% and 52% in 2003, 1% and 66% in 2004, 1% and 43% in 2005, 0.5% and 57% in 2006, and 1% and 58% patients in 2007. B1 MRSA strain was predominant. Children ages 4–7 years ($p < 0.02$), glucocorticoid use in NP ($p < 0.02$), rate of hospitalization ($p = 0.005$), and specific local IgE level ($p < 0.001$) were significantly associated with MRSA colonization.

Conclusion: The nasal carriage of MRSA in patients with nasal polyposis is high, undetectable, and growing. It is possible that allergy and specific IgE levels maybe the cause of nasal carriage of MRSA. Children with NP and AR are an unidentified and less well studied group at high risk for spreading MRSA in children's hospitals, day-care centers, and schools.

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69.020

Escherichia coli Pathotypes Isolated in Inflammatory Bowel Diseases and Oncological Diseases of Gastrointestinal Tract

M. Kmetova¹, K. Curova¹, L. Gombosova², M. Zakuciova², I. Lazurova², M. Sabol¹, L. Siegfried^{1,*}

¹ Institute of Medical and Clinical Microbiology, University P.J. Safarik and L. Pasteur University Hospital, Faculty of Medicine, Kosice, Slovakia

² I. Internal Clinic, University P.J. Safarik and L. Pasteur University Hospital, Faculty of Medicine, Kosice, Slovakia

Introduction: In the literature there are many informations reporting on the relationship between *E. coli* and their ability to cause gastrointestinal diseases (Sooka et al., 2004). Some investigators (Boudeau et al., 2001) even indicate possible role of *E. coli* in the initiation of colorectal cancer.

The aim of our study was to indicate a possible association between *E. coli* and both inflammatory and oncological diseases analysing presence of *E. coli* pathotypes using demonstration of virulence genes in isolated strains.

Materials and Methods: For demonstration of virulence genes *ipaH* and *iucC* protocol according Kuhnert et al. (1997) was used. Demonstration of α -hly, *afa*, *aer*, *cnf1*, *sfa*, *pap* genes was performed according Le Bouguenec, et al (1992) and Yamamoto et al. (1995). *stx1*, *stx2*, *ehly* genes were detected according Paton & Paton (1998) and *ial*, *st*, *lt*, *eae*, *bfpA* genes were detected according Lopez-Saucedo et al. (2003). Specific gene products were detected using electrophoresis on 2.0% agarose gels and visualized by staining with ethidium bromide under UV light.

Results: Total of 437 *E. coli* strains were isolated from colon biopsy samples of 63 patients with inflammatory bowel disease (IBD): 85 strains in Crohn's disease (CD), 119 strains in ulcerative colitis (UC), 193 in non-inflammatory bowel disease (NonIBD) and 40 strains in colon cancer (NO). Adherent-invasive *E. coli* (AIEC) strains were found in the following frequencies: NO (73%), UC (50%), CD (35%) and 6.7% in non-inflammatory bowel disease. This result indicates possible role of AIEC in the pathogenesis of inflammatory bowel

(CDEC) were isolated in patients with UC (24.1%) and CD (4.7%). No CDEC strains were isolated in NO patients. Gen pCVD432 typical in enteroaggregative *E. coli* (EAaggEC) was detected only in 2.5% of tested *E. coli*. Results obtained indicate that CDEC may play role in pathogenesis of CD. Enteropathogenic *E. coli* (EPEC) and enterotoxigenic strains (ETEC) represented 1.2%, and 1.8%, respectively of all isolated *E. coli* strains. Enteroinvasive (EIEC) and shiga toxin-producing *E. coli* (STEC) were not found in our collection of samples.

Conclusion: Compared to other *E. coli* pathotypes a higher incidence of adherent-invasive *E. coli* isolated from biopsy samples from colon cancer and inflammatory bowel disease indicates possible role of the *E. coli* pathotype in the pathogenesis of these gastrointestinal diseases.

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Carriage of *Staphylococcus aureus* in Cats and Their Owners

M.V. Boost*, S.P. Wong, M.M. O'Donoghue

The Hong Kong Polytechnic University, Hong Kong, China

Objectives: The role of dogs, horses, and pigs as carriers of *Staphylococcus aureus* and sources of infection in humans is well recognized, but less attention has been paid to carriage in cats, though human infections from colonized feline sources have been reported. MRSA has been isolated from infections in cats, but there have been no large-scale studies of colonization of cats and their owners.

Methods: Nasal swabs, collected from 231 clinically-normal domestic cats and their owners (218) attending one of five veterinary clinics, were cultured on blood agar, mannitol salt agar (MSA), MSA with 6 μ g/ml oxacillin, and enriched in brain heart infusion broth with 5% salt. *S. aureus* was identified using Staphaurex and resistance to 8 mg/ml acriflavine. Susceptibility to a range of antibiotics was determined by disc diffusion. MRSA was confirmed by the presence of *mecA* using PCR. Pulsed field gel electrophoresis (PFGE) was performed to determine if owners and their pets were co-colonized by similar *S. aureus* strains.

Results: 5.6% of cats and 24% of their owners were nasally colonized with *S. aureus*, two owners carrying MRSA. PFGE revealed that of the four co-colonized owner-cat pairs, three were indistinguishable, and the fourth differed by only one band. Two of these owners were health care workers (HCW), and a third had a household member who had recently been hospitalized and received antibiotics. Of the two MRSA colonized owners, one was a HCW, colonized by a multi-resistant HA-MRSA. The second owner's strain was resistant only to beta-lactams and chloramphenicol.

Conclusions: Nasal carriage of *S. aureus* in cats was lower than the 8.8% we found in dogs, none being MRSA carriers. Carriage in cat owners was similar to the general population,

with 0.9% carrying MRSA. Co-colonization of cat and owner may be associated with owner's occupation in health care.

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Imported Baby Corn Causing Outbreaks of Shigellosis in Denmark and Australia

H.C. Lewis^{1,*}, S. Ethelberg¹, K.E.P. Olsen¹, M. Lisby², S.B. Madsen², M. Kirk³, R. Stafford⁴, K. Ungchusak⁵, K. Mølbak¹

¹ Statens Serum Institut, Copenhagen, Denmark

² Fødevareregion Øst (Regional Veterinary and Food Control Authority East), Copenhagen, Denmark

³ OzFoodNet, Department of Health, Canberra, Australia

⁴ OzFoodNet, Communicable Diseases Branch, Queensland Health, Brisbane, Australia

⁵ Bureau of Epidemiology, Ministry of Public Health, Nonthaburi, Thailand

Background: Outbreaks of foodborne shigellosis are rare in developed countries. Concurrent outbreaks of *Shigella sonnei* infection were detected in Denmark and Queensland, Australia in mid-August 2007. Baby corn or sugar snaps imported from Thailand were suspected to be the vehicle after preliminary interviews in Denmark. Both foods were recalled in Denmark on 17 August. Collaborative investigations were undertaken in Denmark, Australia and Thailand to pinpoint the source of the outbreaks.

Methods: *Sh. sonnei* cases were ascertained through national surveillance systems in Denmark and Australia (01/08/2007–30/09/2007). In Denmark, we conducted a retrospective cohort study amongst employees in one affected workplace to identify the source of infection. The outbreak strain was characterised using pulsed field gel electrophoresis (PFGE) and shared using PulseNet International. We undertook food trace-back and microbiological investigation of samples from implicated batches.

Results: 215 cases were laboratory-confirmed in Denmark and 12 in Australia, along with a further 43 epidemiologically-linked cases. In the cohort study, we identified 27 symptomatic cases amongst 117 respondents (response rate 69%). The attack rate was 56% among employees who ate baby corn on 6 or 7 August (RR 4.0 95%CI: 1.8-8.9 and 3.7, 95%CI: 1.6-8.1 respectively) and in a multi-variable analysis, baby corn was the only independent risk factor. PFGE profiles of outbreak strains in Denmark and Australia were indistinguishable. We did not detect *Shigella spp.* in baby corn, but isolated high levels of *Escherichia coli* and *Salmonella enterica*. We identified a packing house in Thailand, which supplied baby corn to both Denmark and Australia.

Conclusion: Epidemiological, microbiological and trace-back evidence identified baby corn imported from one packing house in Thailand as the source of large *Sh. sonnei* outbreaks in Denmark and Australia. These outbreaks highlight the importance of international communication for linking outbreaks and pinpointing the source. We recommend improving hygiene standards for raw exotic vegetables and blanching before consumption.

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Overlook on Epidemiology and Causative Agents of Rickettsia in Adults in Albania

N. Çomo*, E. Muço, D.H. Kraja, A. Kica, E. Meta, K. Duraku

University Hospital Center, Service of Infectious Diseases, Tirana, Albania

Objective: Knowing the epidemiology and causative agents of rickettsia.

Materials: Study involved 202 cases with rickettsia ages 14–70 years old during 1986–2006. The identification was achieved through ELISA, Complement, Indirect Immunofluorescence and Weil-Felix Reaction.

Methods: Epidemiologic View - We have analyzed the distribution in years, seasons and group ages of rickettsiose Causative agents. Rickettsia were classified based on pathogen and clinical presentation.

Results: Epidemiologic -The number of cases with Rickettsia varies from 6–84 yearly with a prevalence in months June-September. The incidence was consist with peaks every 4–5 years. The more affected group ages were 20–40 years old, but 14–70 years old were affected as well.

Causative Agents: Exantematike Typhos (Murine Typho) 142 cases. Mediterran Butunose Fever 50 cases. Q Fever 10 cases.

Conclusions:

- Rickettsioses are yearly diseases.
- In Albania there are 3 causative group of Rickettsia: Murine Typho, Mediterran Butunose Fever, Q Fever.
- The most common our is the Typho Murine 70.3% (142 cases).

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100 Years of Trachoma in the State of Sao Paulo, Brazil

E.J.A. Luna^{1,*}, N.H. Medina², M.A. Mauricio²

¹ Instituto de Medicina Tropical USP, Sao Paulo, Brazil

² Sao Paulo State Health Department, Sao Paulo, Brazil

Trachoma was introduced in the State of Sao Paulo with the immigrants from Mediterranean countries, in late XIX century. It soon reached high prevalence rates in the whole State. In 1907 the State government organized the first "Trachoma Campaign". The aim of the present study was to recover the "epidemiologic history" of trachoma in Sao Paulo, as its recognition as a public health problem turns a century old.

A descriptive study on the trends of trachoma occurrence was undertaken. Data on trachoma occurrence were gathered from all identified sources. The main source was the archive of Sao Paulo State Health Department. There was no systematic data collection in the early years of the program. From 1938 until 1976 the State Trachoma Institute maintained a routine information system. From 1983 on, data were obtained from the State's epidemiologic surveillance system, and published studies.

Peak incidence rate was in 1951. Incidence rates gradually decreased from 429 per 100,000 in 1951 to 25 in